TB (Tuberculosis)

TB is a "notifiable disease", so must be reported to government authorities. In England TB has been identified as a public health priority due to the health, social and economic burden of the disease. The rates of TB and the risks of delayed diagnosis, drug resistance, and onward transmission are greatest among socially marginalised, under-served populations such as illicit drug users and the homeless.

Summary points

- The TB incidence rate in Bristol remains higher than England's average. In the last 3 years (2021-23) the average number of notifications in Bristol was 42 per year.
- There were 43 notified TB cases in Bristol in 2020[1], a slight decrease from 2019 (50). The annual rate per 100,000 population has also slightly decreased from 10.8 in 2019 to 9.2 in 2020.
- Among Core Cities, Bristol's TB incidence rate is 5th highest, after Manchester, Birmingham, Nottingham and Newcastle.
- In 2023, 66.7% of pulmonary TB cases started treatment within 4 months of symptoms onset – lower than England's average of 70.0%.

Incidence

In Bristol, incidence rates of TB remain higher than the England average but no longer significantly so – see figure.1. Following a period of continuous decline in incidence between 2012-14 and 2020-22, the latest 3 year average rate of TB in Bristol (2021-23) was 8.8 notified cases per 100,000 population, a slight increase on the 2020-22 period (8.0 per 100,000).

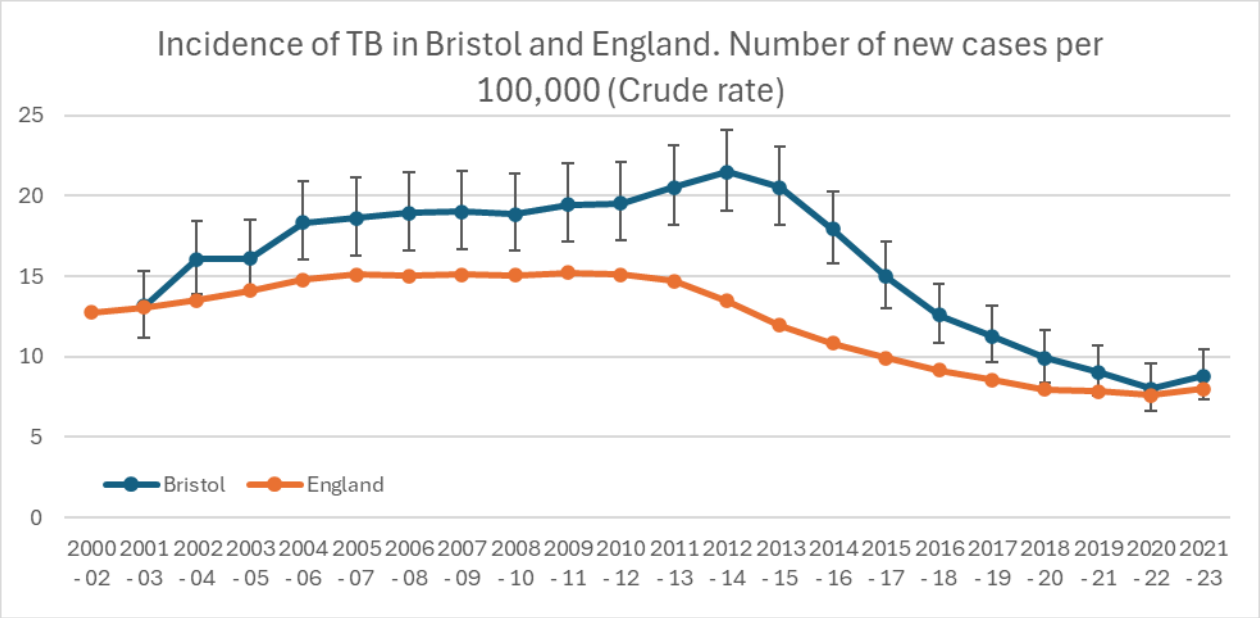

Fig 1: TB incidence rates, 2001/03-2021/23; Source: Public Health Outcomes Framework April 2025

[1] UK Health Security Agency. (2021) Tuberculosis in the South West: Annual Review 2021: Presenting data to end of 2020.; https://www.gov.uk/government/publications/tuberculosis-tb-regional-reports

Despite the improvement over the last nine years the 2021-23 rate is still higher than the England average of 8.0 notifications per 100,000 and significantly higher than the South West regional average of 3.1 per 100,000 population. Compared to other cities, Bristol has the 5th highest of English Core Cities[2], and 9th highest of "CIPFA nearest statistical neighbours"[3]- fig 2 and fig 3.

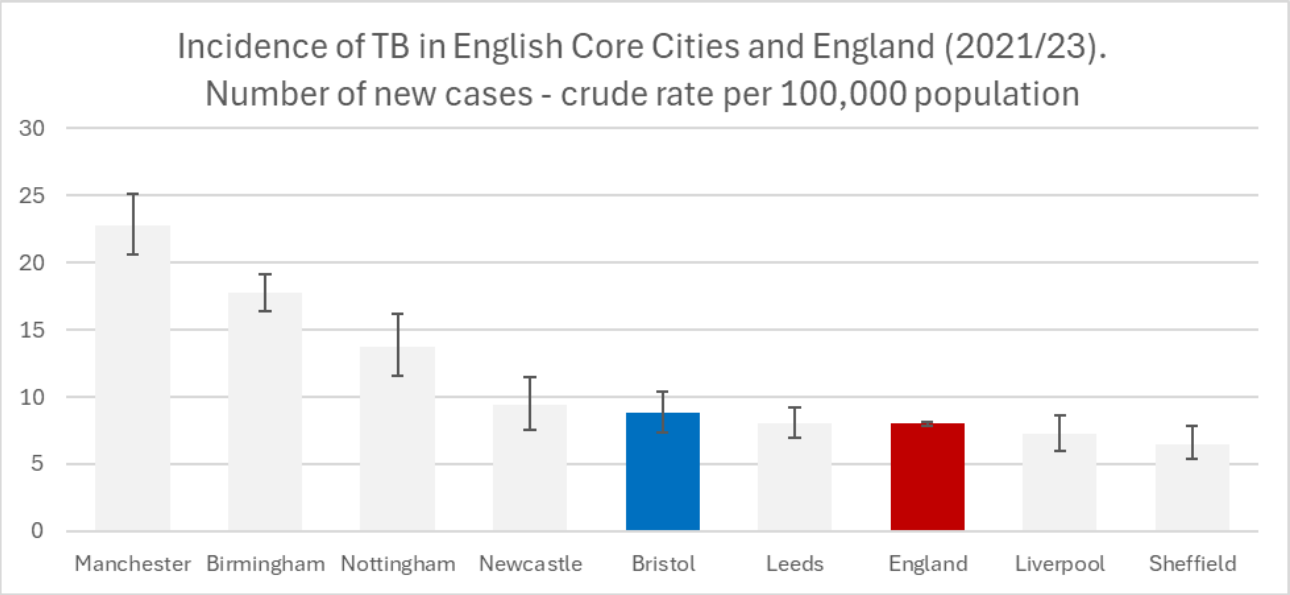

Fig 2: TB incidence rates, 2021-23 for Core Cities; Source: Public Health Outcomes Framework April 2025

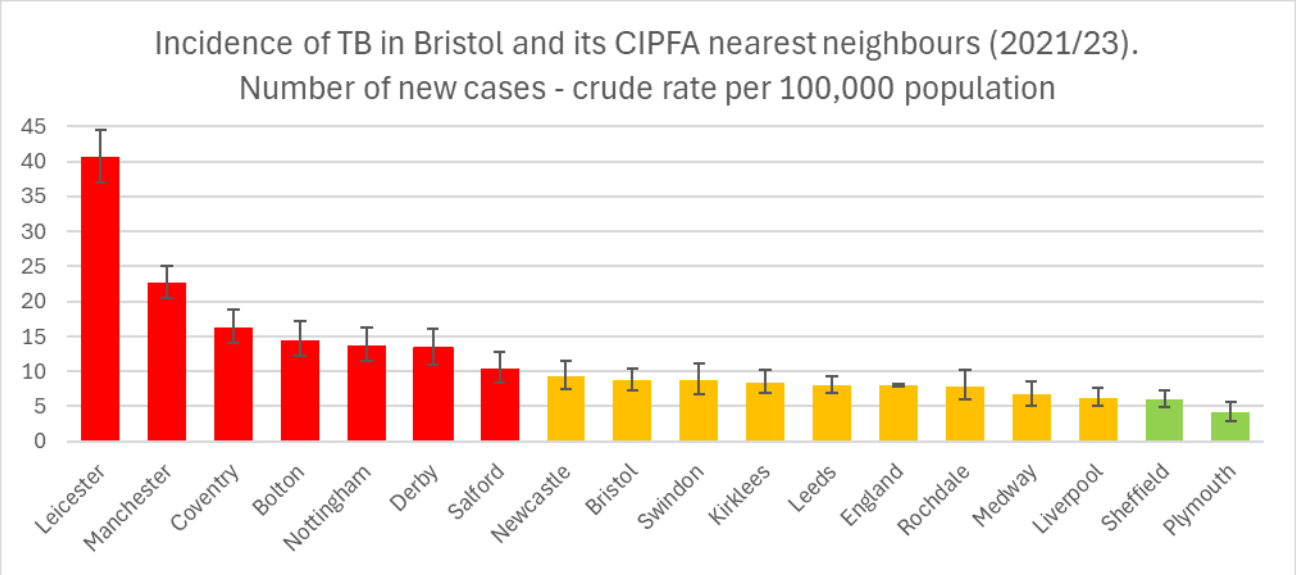

Fig 3: TB incidence rates, 2021-23 for CIPFA nearest neighbours; Red bars indicate rates statistically significantly higher than England average; amber bars indicate rates statistically similar and green bars – rates statistically significantly lower than England average. Source: Public Health Outcomes Framework April 2025.

[2] Birmingham, Bristol, Leeds, Liverpool, Manchester, Newcastle upon Tyne, Nottingham, Sheffield

[3] Statistical neighbours provide a method for benchmarking progress. For each local authority (LA), these models designate a number of other LAs deemed to have similar characteristics. These designated LAs are known as statistical neighbours. CIPFA model uses statistical processes but the factors upon which the classifications are based need to provide a balanced representation of the authorities' traits.

Treatment

In 2023, 42.9% of pulmonary TB cases started treatment within two months of symptoms onset (England average 39.9%) and 66.7% within 4 months of symptoms onset (England average 70.0%).

The number of new cases per year places a notable demand on the health care system. TB "contact tracing" provides an opportunity to identify undiagnosed cases and is key to management of TB. With new testing tools latent TB can be identified (that could otherwise wake up and cause active disease) and appropriate action taken to support these people.

There is an established TB service operating across Bristol which leads on the clinical management of cases, contact tracing and works with UK Health Security Agency (UKHSA) in response to more complex TB incidents or outbreak situations.

Equalities data:

The UKHSA 'Tuberculosis in the South West: 2021'[4] report is the latest published report providing data on health inequalities within the South West region.

Most TB cases in 2020 were of White ethnicity (49.7%), the next most common ethnicities were Indian (16.4%) and Black-African (15.2%). The proportion of cases in the Indian and Black African population increased in 2020 compared to 2019.

The largest proportion of cases (31.7%) lived in the most deprived areas of the region (the most deprived IMD2019 decile).

The UKHSA 's 'Tuberculosis in England 2022 report'[5] presents the TB notification rates per 100,000 population for the year 2021 by deprivation decile (IMD 2019) – fig 4. The rate of TB increases with increasing levels of deprivation: 18.0 per 100,000 in the 10% of the population living in the most deprived areas compared with only 3.3 per 100,000 in the 10% of the population living in the least deprived areas.

[4] UK Health Security Agency. (2021) Tuberculosis in the South West: Annual Review 2021: Presenting data to end of 2020; https://www.gov.uk/government/publications/tuberculosis-tb-regional-reports

[5] UK Health Security Agency. 'Tuberculosis in England 2022 report', Tuberculosis in England, 2022 report (data up to end of 2021) - GOV.UK (www.gov.uk)

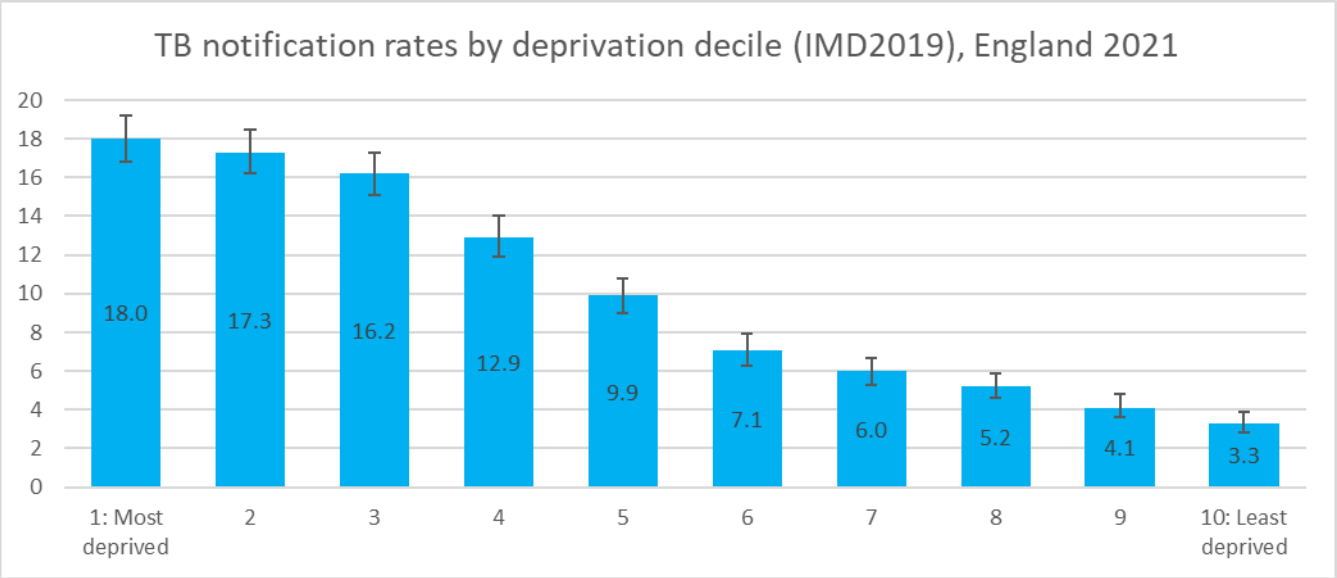

Fig 4: TB notification rates, England 2021; Source: Public Health England's 'Tuberculosis in England 2022 report'.

Covid-19 impact:

"During 2020, there were major impacts on healthcare, migration, and social interactions due to the ongoing COVID-19 pandemic which may have affected TB notifications in complex ways. It is important to note that the data and findings from 2020 are unlikely to represent the true burden of disease. As such their use in monitoring progress against both elimination goals and planning service provision will require careful consideration and further analysis of both 2020 and 2021 data.

TB prevention and treatment services have been impacted by the Covid pandemic, most notably the TB nurse service suspended the LTBI new entrant screening programme. The service receives data every 6 months with a list of eligible registrants at Bristol GP practices. Eligible individuals are invited by the service to be screened using simple English and the TB alert video that explains the screening process. In the year 2020 to 2021 the TB nurse service suspended screening clinics from March 2020 until the end of October 2020 due to COVID-19 restrictions. The service was resumed from November 2020 onwards[6]"

Further data / links:

- UK Health Security Agency. (2021) Tuberculosis in the South West: Annual Review 2021: Presenting data to end of 2020; https://www.gov.uk/government/publications/tuberculosis-tb-regional-reports
- UK Health Security Agency. 'Tuberculosis in England 2022 report', Tuberculosis in England, 2022 report (data up to end of 2021) - GOV.UK (www.gov.uk)
- Public Health Outcomes Framework https://fingertips.phe.org.uk/profile/public-health-outcomes-framework

Date updated: April 2025 **Date of next update**: April 2026

[6] Tuberculosis in the South West: 2021 (presenting data to end of 2020) (publishing.service.gov.uk)